



US006213783B1

(12) **United States Patent**
Kankkunen

(10) **Patent No.:** **US 6,213,783 B1**
(45) **Date of Patent:** **Apr. 10, 2001**

(54) **ARRANGEMENT IN CONNECTION WITH ANAESTHETIC DEVICES**

4,451,113 5/1984 Zuniga 439/38
5,779,487 * 7/1998 Gatin 439/39
5,829,987 * 11/1998 Fritsch et al. 439/38

(75) Inventor: **Jukka Kankkunen**, Helsinki (FI)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **Instrumentarium Corporation**,
Helsinki (FI)

97/05673 2/1997 (WO) .

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

* cited by examiner

Primary Examiner—Hien Vu

(74) *Attorney, Agent, or Firm*—Andrus Sceales Starke & Sawall, LLP

(21) Appl. No.: **09/033,813**

(22) Filed: **Mar. 3, 1998**

(30) **Foreign Application Priority Data**

Mar. 4, 1997 (FI) 970925

(51) **Int. Cl.⁷** **H01R 11/30**

(52) **U.S. Cl.** **439/39**

(58) **Field of Search** 439/38–40

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,521,216 * 7/1970 Tolegian 439/39

(57) **ABSTRACT**

An arrangement in connection with anaesthetic devices which comprise at least two module units, which are integrated to function together, and data transmission between the module units is carried out by means of a connector arrangement, which comprises contact means arranged in both module units. To provide a durable connector arrangement at least one of the connector means is mobile so that when the module units and thereby the contact means are moved close to one another, the mobile contact means moves so that it comes into contact with the contact means in the other module unit as a result of magnetising force.

9 Claims, 3 Drawing Sheets

